

The economic costs of type 2 diabetes: a global systematic review

PharmacoEconomics

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Table EMS_1 Information on cost of illness studies (2001 - 2014)

Ref.	Horizon	Country	Sample size	Population	Perspective	Approach	LCU	Aggregate costs (mill. \$)			Per capita costs			
								Total	Direct	Indirect	Direct (LCU)	Direct (\$)	Indirect (LCU)	Indirect (\$)
[10]	2002-2003	35 LMIC	121051	General pop.	Patient	RB/M	\$				3 at 50th percentile to 157 at 95th percentile	3.40 at 50th percentile to 178 at 95th percentile		
[11]	NA	Various Arab countries	NA	General pop.	Healthc. system	SAM	US\$				US\$529 ^j			
[14]	2000	ARG	1250300	General pop.	Societal	SAM	ARS	16547	1130	15416 ^b	597 ^a	904 ^a	8145 ^a	12330 ^a
[42]	2000-2051	AUS	1294	General pop.	Healthc. system	SDS	AUD		1514 (2000), 2282 (2051)		3496 ^a (2000)	3379 ^a (2000)		
[14]	2000	BHS	12800	General pop.	Societal	SAM	BSD	43	25.2	16	1605	2507	1009	1575
[41]	2001	BHS	10435	General pop.	Societal	SDS	BSD	233	17	216 ^b	836 ^a	1310 ^a	10789 ^a	16914 ^a
[41]	2001	BRB	28438	General pop.	Societal	SDS	BBD	75	69.2	5	2455	2433	204	202
[14]	2000	BRB	23300	General pop.	Societal	SAM	BBD	307	26	281 ^b	1099 ^a	1117 ^a	11880 ^a	12076 ^a
[15]	1999	BEL	735 patients	General pop.	Healthc. system	SAM	EUR		1561		3295	4704		
[15]	1999	EUR	7000 (overall)	General pop.	Healthc. system	SAM	EUR				2834		Not possible because no country specific estimate	
[14]	2000	BOL	153900	General pop.	Societal	SAM	BOB	901	338	563 ^b	3435 ^a	2199 ^a	5717 ^a	3659 ^a
[14]	2000	BRA	4532600	General pop.	Societal	SAM	BRL	54892	9598	45294 ^b	1595 ^a	2118 ^a	1595 ^a	9993 ^a
[17]	2008-2035	CAN	147498 with diabetes	Four Alberta Health and Wellness databases	Healthc. system	SAM	CAD		5934 (2007); 20032 (2035)		4563 ^a	4023 ^a		
[18]	1993-2001	CAN	57774	Saskatchewan Canadians	Healthc. system	SAM	CAD				large urban:3563 (1993),3454 (2001), small	large urban: 2665 (1993), 3591 (2001), small urban: 3453		

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								Total	Direct	Indirect	Direct (LCU)	Direct (\$)	Indirect (LCU)	Indirect (\$)	
			(excluding Indians)								urban: 3321 (1993), 3563 (1993), 3427 (2001), rural: 3502 (2001), rural: 3420 3368 (1993), (2001) 3289 (2001)				
[16]	2000-2016	CAN	Whole pop. (with 34444 giving actual costs data for baseline)	General pop.	Healthc. system	SAM	CAD	5230 (2000) to 9140 (2016)			3329 ^a	3735 ^a			
[56]	1998	CAN	1993920 (incl. undiagn. DM cases)	General pop.	Societal	SDS	CAD	7857	5746	2110	2587 ^a	2882 ^a	950 ^a	1058 ^a	
[52]	1992-2001	CAN	3469 with T2D patients form Saskatchewan Health's administrative database	Incidence T2D	Healthc. system	SDS	CAD				3880 three years after diagnosis to 4441 after 10 years. The 10-year individual cost cumulative cost was 38006	4034 three years after diagnosis to 4618 after 10 years. The 10-year individual cumulative cost was 39517			
[43]	1996	CAN	38124 Diabetes patients form Saskatchewan Health's administrative database	Healthc. system	SDS	CAD		151			3524	3955			
[62]	2001	CAN	5284 (Indians) + 41630 (general pop.) with	Registered Indians according to the Indian Act	Healthc. system	RB/M	CAD				Excess costs: Indians 2227, General pop. 2378 (total costs with diabetes: 3766 for	Excess costs: Indians 2316, General pop. 2473: (total costs with diabetes: 3766 for			

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				diabetes, 11692 (Indians) + 98680 (general pop.) without diabetes							diabetes: 3,622 for Indians/ 3253 in general pop., controls: 1,395 for Indians/ 875 for general pop.)	Indians/ 3382 in general pop., controls: 1450 for Indians/ 910 for general pop.)		
[14]	2000	CHL	496500	General pop.	Societal	SAM	CLP	5890	719	5171 ^b	320601 ^a	1447 ^a	2307131 ^a	10416 ^a
[92]	2007	CHN	1478	T2D patients in these Chinese hospitals	Healthc. system	Survey	RMB				4564 (median), 7926 (mean)	1246 (median), 2164 (mean)		
[80]	2007 and 2030 (projection)	CHN	2040	In-patients and out- patients with DM in 20 hospitals	Societal	Survey	RMB	72916 (2007), 132472 (2030)	67946 (2007), 123187 (2030)	4982 (2007), 9058 (2030)	11555	3401	1586	467
[13]	2009- 2010	CHN	1232 (diabetes), 1201 (no diabetes)	General pop.	Healthc. system	RB/M	RMB				4135 (3.38 times greater than controls)	1136 (3.38 times greater than controls)		
[81]	2007	CHN	2054	T2D patients in these Chinese hospitals	Healthc. system	Survey	RMB				4800 (median), 10164 (mean)	1412 (median), 2991 (mean)		
[19]	32 years	COL	NA	Hypothetical average Columbian type 2 DM patient	Societal	SAM	COP	5330	1817	3513	611750	570	1187000	1106
[14]	2000	COL	937700	General pop.	Societal	SAM	COP	7737	1241	6496 ^b	923826 ^a	1323 ^a	4836001 ^a	6928 ^a
[14]	2000	CRI	154900	General pop.	Societal	SAM	CRC	1026	210	817 ^b	192194 ^a	1353 ^a	749278 ^a	5274 ^a
[14]	2000	CUB	592400	General pop.	Societal	SAM	CUP	1721	923	798 ^b	1219 ^a	1558 ^a	1054 ^a	1347 ^a

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[20]	2007	CZE		Insured in healthcare system (63.1% of pop.)	Healthc. system	SAM	CHK	190						
[94]	1993	DNK	948	General pop.	Societal	WTP	DKK					1128 (mean), 300 (median)	191 (mean), 51 (median)	
[14]	2000	DOM	254100	General pop.	Societal	SAM	DOP	1410	509	901 ^b	14580 ^a	2003 ^a	25801 ^a	3545 ^a
[14]	2000	ECU	267300	General pop.	Societal	SAM	USD	2830	1104	1727 ^b	873 ^a	4129 ^a	1366 ^a	6460 ^a
[14]	2000	SLV	219400	General pop.	Societal	SAM	SVC	1385	381	1004 ^b	626 ^a	1737 ^a	1650 ^a	4577 ^a
[53]	2005-2010	FIN	1890 with T2D	People with T2D in two cities in Finland	Healthc. system	SDS	EUR				1038	1087		
[63]	1998, 2000	FRA	704423 (1998), 1145603 (2000) with diabetes	Metropolitan France	Healthc. system	RB/M	EUR	2784 (1998), 3268 (2000)			1529 (1998), 1655 (2000)	2107 (1998), 2241 (2000)		
[15]	1999	FRA	751 patients	General pop.	Healthc. system	SAM	EUR	5478			3064	4214		
[15]	1999	DEU	809 patients	General pop.	Healthc. system	SAM	EUR	1653			3576	4752		
[65]	2001	DEU	306736 (26971 with diabetes)	General pop.	Societal	RB/M	EUR	Excess: 19364 (total: 40650)			Excess 2507 (total 5262)	Excess: 3329 (total: 6987)	Excess 1328 (total: 5019)	Excess: 1763 (total: 6664)
[64]	2000-2007	DEU	320000 (2000) to 275000 (2007)	AOK Hessen	Healthc. system	RB/M	EUR	17299 (2000), 25614 (2007)			2400 (2000), 2605 (2007)	3493 (2007), 3218 (2000)		

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[21]	1995-2003	DEU	3268	Newly diagnosed T2D patients	Healthc. system	SAM	EUR				3210	4075		
[66]	2000-2009	DEU	not given, only DM patients stated (30472)	AOK Hessen	Healthc. system	RB/M	EUR	21230 (2000), 26226 (2009)			2779 (2000), 2611 (2009)	3471 (2000), 3261 (2009)		
[14]	2000	GTM	368700	General pop.	Societal	SAM	GTQ	2535	878	1657 ^b	6131 ^a	2382 ^a	11572 ^a	4495 ^a
[14]	2000	GUY	28400	General pop.	Societal	SAM	GYD	141	80	62 ^b	131041 ^a	2800 ^a	102135 ^a	2182 ^a
[14]	2000	HTI	79500	General pop.	Societal	SAM	HTG	249	152	97 ^b	12782 ^a	1912 ^a	8175 ^a	1223 ^a
[14]	2000	HND	193000	General pop.	Societal	SAM	HNL	772	366	405 ^b	8750 ^a	1898 ^a	9680 ^a	2100 ^a
[82]	2004	HKG	147	T2D patients attending the DM outpatient clinic at a public hospital	Societal	Survey	USD				11638	2288	1817 ^e	357 ^e
[83]	1998, 2005	IND	556 with T2D (urban=309, rural=247)	T2D patients in India	Patient	Survey	INR				Median values: 10000 (urban), 6260 (rural)	Median values: 773 (urban), 484 (rural)		
[91]	2009	IND	718	Diabetes patients in Chennai city	Societal	Survey	INR	268			25391 (median)	1557 (median)	4970 (median)	305 (median)
[84]	2009	IRN	4500	Diabetes patients from Tehran and Fars province	Societal	Survey	IRR	9611 ^h	5187 ^h	4420 ^h	8358592	2142	8578816	2199
[67]	2004, 2005	IRN	710 (T2D), 904 (controls)	Pop. in Teheran	Societal	RB/M	IRR	401 (Teheran); 2117 ^h (Iran)	327 (Teheran); 1727 ^h (Iran)	74 (Teheran), 390 ^h (Iran)	876622 (Teheran)	443 (Teheran)	200146 (Teheran)	101 (Teheran)

Ref.	Horizon	Country	Sample size	Population	Perspective	Approach	LCU	Aggregate costs (mill. \$)			Per capita costs			
								Total	Direct	Indirect	Direct (LCU)	Direct (\$)	Indirect (LCU)	Indirect (\$)
[22]	1999	IRL	701	T2D patients of four Irish hospitals	Healthc. system	SAM	EUR				2469	2867		
[68]	2001	ISR	24632	Insured patients in HMO	Healthc. system	RB/M	ILS	433			6002 (2001), 3926 (1999)	1950 (2001), 1275 (1999)		
[23]	1998	ITA	1263	T2D patients from randomly drawn practices across Italy	Societal	SAM	EUR	8289 ^d	7930	359	2991	4588	135 ^{a,c}	208 ^{a,c}
[70]	2003-2004	ITA	33792 (diabetes) and 863123 (no diabetes)	Turin pop.	Healthc. system	RB/M	EUR				2465 (3361 (diabetes), 896 (no diabetes)	3328 (4537 (diabetes), 1210 (no diabetes)		
[24]	2001-2002	ITA	299	T2D patients who visited a diabetologic center in Italy (DC)	Healthc. system	SAM	EUR				1910	2823		
[69]	2006	ITA	311979	People with DM at 22 local health districts	Healthc. system	RB/M	EUR				2589	3296		
[41]	2001	JAM	186036	General pop.	Societal	SDS	JMD	556	454	102	44647	2439	10046	549
[14]	2000	JAM	181400	General pop.	Societal	SAM	JMD	1037	345	693 ^a	32251 ^a	1901 ^a	64787 ^a	3818 ^a
[25]	1990-2001	JPN	4535	Community-dwelling in Shiga	Healthc. system	SAM	JPY				189060 (diabetes), 99900 (non-diabetes)	1674 (diabetes), 884 for (non-diabetes)		
[14]	2000	LAC	Diabetes prevalence	Pop. from all countries in	Societal	SAM	USD	82304	13529	68774 ^b	703 ^a	887 ^a	3576 ^a	4512 ^a

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								Total	Direct	Indirect	Direct (LCU)	Direct (\$)	Indirect (LCU)	Indirect (\$)
			of 15.2 million	Latin America and Caribbean										
[14]	2000	MEX	3738000	General pop.	Societal	SAM	MXN	30677	4006	26671 ^b	4994 ^a	1072 ^a	33249 ^a	7135 ^a
[28]	2004, 2006	MEX	951417 estimated cases	All users of health care in public institutions	Societal	SAM	MXN	290 ^d	229	61 ^k	1472 ^a	242 ^a	386 ^a	64 ^a
[29]	2010	MEX	Whole pop.	Population demanding services at Mexican healthcare institutions for T2D	Societal	SAM	MXN	1066	470	596	4016 ^a	485 ^a	5090 ^a	610 ^a
[26]	2005	MEX	Whole pop.	General pop.	Patient	SAM	MXN			284 OOP expenditures (52% of overall expenditures)				
[27]	2003, 2005	MEX	Whole pop.	General pop. using public healthcare institutions	Societal	SAM	MXN	532 (2005)	235 (2005)	297 (2005)	1467 ^a (2005)	263 ^a (2005)	1852 ^a (2005)	331 ^a (2005)
[44]	2002, 2004	MEX	497	IMSS insured	Healthc. system	SDS	MXN		661 (2004)		35622 ^a (2004)	4672 ^a (2004)		
[30]	1998	NLD	1371 with T2D	T2D patients in the Netherlands	Societal	SAM	NLG	1014 ^d	953	61	4023	2780	282 ^a	195 ^a
[79]	2000- 2004	NLD	2.5 million (641200 with diabetes)	Dutch people with diabetes	Healthc. system	RB/M	EUR		571 (2000), 1063 (2004)		974 (2000), 1283 (2004)	1259 (2000), 1658 (2004)		

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								Total	Direct	Indirect	Direct (LCU)	Direct (\$)	Indirect (LCU)	Indirect (\$)
[15]	1999	NLD	909 patients	General pop.	Healthc. system	SAM	EUR	671			1827	2761		
[14]	2000	NIC	136100	General pop.	Societal	SAM	NIO	442	292	150 ^b	7922 ^a	2145 ^a	4082 ^a	1105 ^a
[12]	July 2003-June 2004	NGA	35	Diabetes patients in out-patient clinic in Nigeria	Patient	SDS	NGN				29366	662		
[45]	2005	NOR	4.6 million from register data of entire pop.	General pop.	Societal	SDS	NRK	319	242	76	20492 ^a	2061 ^a	5067 ^a	650 ^a
[85]	2006	PAK	345	Diabetes patients in Karachi	Societal	Survey	PKR				11580 ^f	620 ^f	840 ^e	45 ^e
[14]	2000	PAN	120500	General pop.	Societal	SAM	PAB	926	222	704 ^b	866 ^a	1846 ^a	2741 ^a	5840 ^a
[14]	2000	PRY	94300	General pop.	Societal	SAM	PYG	738	244	495 ^b	2661903 ^a	2587 ^a	5397747 ^a	5245 ^a
[14]	2000	PER	606800	General pop.	Societal	SAM	PEN	5627	1533	4094 ^b	2890 ^a	2526 ^a	7717 ^a	6746 ^a
[61]	2009	POL	Whole pop	All Polish diabetes patients	Healthc. system	SDS	RSD	3396	1910	1486				
[86]	2007	SRB	99	T2D patients in health centre in Svilajnac	Societal	Survey	RSD	7579 ^h			47865	1610	5548	187
[31]	2002	SRB	360433 people with T2D in Serbia	Serbian T2D patients	Healthc. system	SAM	RSD		280		12457 ^a	761 ^a		
[47]	1998	ESP	1004	Diabetes patients from 29 primary	Healthc. system	SDS	EUR				771	1488		

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								Total	Direct	Indirect	Direct (LCU)	Direct (\$)	Indirect (LCU)	Indirect (\$)
healthcare centres														
[46]	1999	ESP	517	People with DM in region of Cadiz	Societal	SDS	EUR				2560	4690	1844	3379
[32]	2002	ESP	1675304 to 2010365 depending on assumed prevalence	Diabetes patients in National Health System	Healthc. system	SAM	EUR	4010 (6% prev.) – 4461 (5% prev.)			1290 (6% prev.) – 1476 (5% prev.)	2155 (6% prev.) - 2466 (5% prev.)		
[15]	1999	ESP	1004 patients	General pop.	Healthc. system	SAM	EUR	3679			1305	2453		
[54]	1998	ESP	Whole pop. (exact number not given)	Canary Island pop. with diabetes	Societal	SDS	Pts (pre Euro)	75	47	28	78240	907	47928 ^b	556 ^b
[87]	2005	SDN	822	Patients with T2D in Khartoum state in Sudan	Patient	Survey	USD				438	456		
[59]	1987 and 2005	SWE	Whole pop.	General pop.	Societal	SDS	SEK	499 (1987), 1045 (2005)	223 (1987), 383 (2005)	276 (1987), 662 (2005)	12102 (1987), 12287 (2005)	1484 (1987), 1507 (2005)	15000 ^a (1987), 21253 ^a (2005)	1840 ^a (1987), 2606 ^a (2005)
[71]	1993	SWE	70786 (1677 with diabetes)	Southern Sweden	Societal	RB/M	SEK				19411	2855	14777	2174
[72]	2005	SWE	415990 (19226 with diabetes)	Whole Östergötland population	Healthc. system	RB/M	EUR				18293	2243		
[15]	1999	SWE	773 patients	General pop.	Healthc. system	SAM	SEK	929			24927	3319		

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[33]	2004	SWE	8230	Diabetes patients in Uppsala county	Healthc. system	SAM	SEK				33210	3888		
[57]	1998	CHE	1479	T2D patients from randomly drawn practices across Switzerland	Healthc. system	SDS	CHF	561			3004	2030		
[48]	1998-1999	TWN	20757185 (in 1998), 21089859 (in 1999)	People with DM in National Health Insurance	Healthc. system	SDS	TWD				62617 (1998), 60775 (1999)	3499 (1998), 3396 (1999)		
[93]	2006-2007	TWN	498	Diabetes patients in out-patient clinics in northern Taiwan	Societal	WTP	TWD		4003				68118	4004
[34]	NA	TWN	16094	Elderly with DM in Taiwan	Healthc. system	SAM	TWD	51			111982	6338		
[88]	2008	THA	475	Diabetes patients treated in district hospital	Societal	Survey	THB				17638	1082	10569	649
[14]	2000	TTO	71300	Pop. from all countries in Latin America and Caribbean	Societal	SAM	TTD	540	72	468 ^b	3358 ^a	1011 ^a	21780 ^a	6560 ^a
[41]	2001	TTO	135093	General pop.	Societal	SDS	TTD	852	227	625	5722	1677	15797	4628

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[89]	2004	ARE	150	Diabetes patients in Al-Ain District	Healthc. system	Survey	AED				no complication: 5906, with complications: 20774, overall: 16115	no complications: 2047, with complications: 7199, overall: 5585		
[15]	1999	GBR	756 patients	General pop.	Healthc. system	SAM	GBP	244			1558	3065		
[58]	2007	USA	Diabetes prevalence of 16.5 million	General pop.	Societal	SDS	USD	167862	111257	56604	6414	6751	3263	3434
[50]	1998	USA	127991	Medicaid pop.	Healthc. system	SDS	USD	540			4098	4221		
[49]	2002	USA	Diagnosed DM prevalence of 12.1 million	General pop.	Societal	SDS	USD	161896	112947	48948	7601 ⁱ	9346 ⁱ	3294 ^a	4050 ^a
[90]	1996	USA	23200	General pop.	Societal	Survey	USD	78518 (total healthc. costs + indirect costs)	13768 (attributed to diabetes by patient), 73884 (total healthc. costs)	4771 (based on work-loss days (for any health-related cause))	1097 (attributed to diabetes by patient), 5646 (total healthc. costs)	1495 (attributed to diabetes by patient), 7694 (total healthc. costs)	380 ^{a,c}	518 ^{a,c} (based on work-loss days (for any health-related cause))
[74]	2000, 2005	USA	21592 (2000), 127254 (2005)	Employees of large, privately-insured companies	Healthc. system	RB/M	USD				7365 (2000), 7327 (2005)	8349 (2000), 8306 (2005)		
[77]	2000- 2004	USA	3790 (diabetes), 42413 (no diabetes)	General pop.	Healthc. system	RB/M	USD				5035 ⁱ	5708 ⁱ		

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[37]	2000	USA	1364	People with T2D enrolled in managed care programs	Healthc. system	SAM	USD				3715 (median)	4747 (median)		
[76]	2005	USA	32052	American Indians in and around Phoenix, Arizona	Healthc. system	RB/M	USD				5542	6282		
[38]	1996	USA	20937 with diabetes	Employed DM patients	Healthc. system	SAM	USD	126			4430 (17.9% OOP)	6039 (17.9% OOP)		
[75]	2006	USA	3551 (diabetes), 8686 (no diabetes)	General pop.	Patient	RB/M	USD				233	264		
[60]	1998-2003	USA	96873 (5289 had diabetes)	General pop.	Healthc. system	SDS and RB/M	USD	61958 (regression), 43452 (attributable fraction)			4240 (regression), 2980 (attributable fraction)	4966(regression), 3490 (attributable fraction)		
[40]	1998	USA	429918	US veterans	Healthc. system	SAM	USD	2214			3888 ^a	5150 ^a		
[73]	1997-1998	USA	3759 (diabetes), 3759 (without diabetes)	Employed and retired women	Healthc. system	RB/M	USD				5.500 for women < age 65 per year, 25000 for women >= age 65 per year, 233000 lifetime costs	6680 for women < age 65 per year, 30362 for women >= age 65 per year, 282973 lifetime costs		
[35]	10 year follow up	USA	1223 with T2D	People with DM in Michigan	Healthc. system	SAM	USD				7100 (undiscounted per year over 10 year period)	9072 (undiscounted per year over 10 year period)		
[55]	2007	USA	Diagnosed DM	General pop.	Societal	SDS	USD	185682	123788	62108	6649	7095	3328	3552

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			prevalence of 17.5 million											
[51]	2007	USA	256245 (T2D), 256223 (controls)	Non-institutionalized adults	Healthc. system	SDS and RB/M	USD				Matching: 4217, Disease attributable: 3002	Matching: 4500, Disease attributable: 3204		
[36]	2007	USA	7514 with diabetes	US pop. with positive healthcare expenditures in survey	Healthc. system	SAM	USD				11167 ^e	11917 ^e		
[78]	1998	USA	8748 diabetes patients, 8748 matched controls	Employees of large, privately-insured companies	Employer	RB/M	USD				3842	5021	568	743
[39]	2000	USA	984 with DM (540 white, 210 African American, 234 Hispanic)	White, African Americans and Hispanics in the US	Healthc. system	SAM	USD				6616 (6887 if white, 6162 if African American, 5647 if Hispanic)	8453 (8799 if white, 7873 if African American, 7215 if Hispanic)		
[14]	2000	URY	119000	General pop.	Societal	SAM	UYU	1202	147	1055 ^b	9619 ^a	1233 ^a	69171 ^a	8867 ^a
[14]	2000	VEN	610800	General pop.	Societal	SAM	VEF	4820	317	4503 ^b	342 ^a	518 ^a	2100a	7373 ^a
[9]	2005	WHO African region	7020000	General pop.	societal	SAM	\$	28610	9090	19520	876	983	10556	11845

DM Diabetes Mellitus Healthc. System Healthcare system LCU Local currency unit Pop. Population Prev. Prevalence Ref. Reference RB/M regression based/matching SAM Sum-all medical SDS Sum-diagnosis specific

^a Own calculation dividing presented aggregate cost estimate by number of people with diabetes in study

^b Total and direct cost estimates were presented in paper and indirect costs calculated, but not explicitly stated. We calculated indirect costs by deducting the

presented direct costs estimate from the presented total costs estimate to arrive at an indirect costs estimate

^c Calculated the number of people with diabetes by dividing the aggregated direct costs and the per capita direct costs estimate as presented in the study

^d Calculated total costs of diabetes for papers summing up direct and indirect costs

^e Calculated per capita indirect costs deducting direct from total cost estimate presented in study

^f Costs originally presented per visit, to arrive at yearly costs had to multiply costs per visit by number of visits per year

^g Per capita direct costs were presented for different groups of diabetics, calculated average costs for person with diabetes by summing up and weighting costs for non-obese people with diabetes without hypertension, people with diabetes + hypertension, people with diabetes + obesity, people with diabetes + obesity + hypertension

^h The study assumes sample would be nationally representative

ⁱ Study only reported the adjusted incremental cost ratio of 2.39 compared to the average healthcare expenditures of people without diabetes of US\$3630. To calculate the incremental costs of a person with diabetes we multiplied the average healthcare expenditures of people without diabetes by the given cost ratio to arrive at the average healthcare expenditures of people with diabetes. We then deducted from this the average healthcare expenditures of people without diabetes to arrive at the incremental cost estimate

^j Study did not provide the year of costing which is why we present the estimate as provided in the study and refrained from presenting any estimates in international dollar. The estimate presents the per capita direct costs across all included countries

^k Calculated indirect costs by using presented percentages indicating indirect costs relative to direct costs

^l Direct costs attributable to diabetes estimated as difference between total healthcare costs of people with diabetes and total healthcare costs of people without diabetes adjusting for demographic differences